

ENVIRONMENTAL ASSESSMENT

**U.S. FISH AND WILDLIFE SERVICE
PROPOSED VISITOR FACILITY SITE
GREAT SWAMP NATIONAL WILDLIFE REFUGE
BASKING RIDGE, NEW JERSEY**

In compliance with the National Environmental Policy Act of 1969

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CONTENTS

PAGE

Introduction	1
Section 1.0 Purpose For Proposed Action	4
Section 2.0 Need for the Action	5
Section 3.0 Alternatives Including the Proposed Action	7
Section 4.0 Affected Environment	13
Section 5.0 Environmental Consequences	15
Section 5.1 Environmental Consequences of Other Alternatives	16
Section 5.2 Community Concerns	17
Section 6.0 Socio-Economic Impacts	18
Section 7.0 Consultation and Coordination	19
Section 8.0 Appendices	20

Appendix A – References

Appendix B – Comments and Responses

- Attachments:
1. Great Swamp National Wildlife Refuge
 2. Site Map, Alternative A: Weatherlea Farm
 3. Proposed Site Access Road, Alternative A: Weatherlea Farm
 4. Site Map, Alternative B: Scaff Farm
 5. New Jersey Listed Endangered and Threatened Wildlife
 6. Federally Listed Endangered and Threatened Species
 7. Wildlife Species most likely to use Weatherlea Farm Property

This Environmental Assessment (EA) is intended to comply with the National Environmental Policy Act (NEPA) and the Council on Environmental Quality (CEQ) Regulations (40 CFR Parts 1500-1508). The EA provides an introduction, description of the purpose and need for the project, the features of the proposed action, the alternatives considered, the affected environment and resulting consequences.

ENVIRONMENTAL ASSESSMENT

GREAT SWAMP NATIONAL WILDLIFE REFUGE VISITOR FACILITY PROJECT

Introduction

Background:

Great Swamp National Wildlife Refuge (NWR, Refuge) is located in Chatham, Harding and Long Hill Townships of Morris County in north central New Jersey. Morristown, the County Seat of Morris, is seven miles to the north and New York City is twenty-five miles to the east. The 7,600 acre Refuge sits in the lake bed of ancient glacial Lake Passaic, which was formed during the last ice age and encompassed an area 30 miles long by 10 miles wide. Eventual drainage of Lake Passaic created areas where marshes and swamps formed – the 14,000 acre Great Swamp Basin was one such area.

The threat of construction of a jetport in the early 1960's enabled the Great Swamp Committee of the North American Wildlife Foundation to muster the aid of a significant number of volunteers. This grassroots effort raised more than a million dollars to purchase nearly 3,000 acres which were donated to the Department of the Interior. These acres formed the nucleus of the Great Swamp National Wildlife Refuge. Over the years, additional acres have been added to the original tract.

Great Swamp NWR is a link in the chain of refuges for migratory birds that extends along the Atlantic flyway between northern breeding grounds and southern wintering areas. The Refuge is one of 542 refuges in the National Wildlife Refuge System administered by the U.S. Fish and Wildlife Service and was established in 1960 to provide migration, nesting and feeding habitat for migratory birds. In 1966, the National Park Service recognized the value of Great Swamp, designating it as a Registered National Natural Landmark "...possessing exceptional value for illustrating the natural history of the U.S." The eastern half of the Refuge was designated by Congress as a National Wilderness Area in 1968 and is the first Wilderness Area in the Department of the Interior. Generally, no permanent structures, mechanized vehicles, or equipment are allowed in this area, and roads, bridges and buildings have been removed by the U.S. Fish and Wildlife Service to help restore the wilderness character. The remainder of the Refuge is more actively managed to accomplish Refuge objectives.

Great Swamp NWR consists of swampy woodland, hardwood ridges, cattail marsh and grasslands. It is characterized as a brush and timbered swamp with meandering brooks and low ridges or knolls rising from five to 15 feet above the surrounding swamp. In several places, the swamp opens into small marshes. The Refuge serves as an important resting, nesting and feeding area for migratory birds, especially waterfowl, and 5 impoundments are managed to provide enhanced wetland habitat during the migration. Other portions of the Refuge are managed to maintain early successional grassland and forest habitats through mowing, hydro-

axing or prescribed burns. Maintenance of bluebird and wood duck boxes provides additional nesting habitat.

The Refuge receives approximately 350,000 visits annually. According to Refuge Management Information System Public Education and Recreation Data, over 333,000 visits were recorded at the Refuge for the year 2002-2003. Approximate on-site interpretation and nature observation accounted for 284,000 visits, hunting resulted in 750 visits, and “other recreation” accounted for an additional 44,000 visits.

Project history:

In 1964 at the dedication of the Great Swamp National Wildlife Refuge, U.S. Department of the Interior Secretary Stewart Udall expressed the need and importance of having a refuge visitor facility and challenged the U.S. Fish and Wildlife Service to create “the finest nature education facility in the land.”

Over the years this need continued to be expressed, specifically in the 1970 Great Swamp National Wildlife Refuge Master Plan (hereafter referred to as the 1970 Master Plan) and in an investigation by the National Interpretive Planning Team in 1971. In 1987, the 1970 Master Plan was updated and the need for a visitor facility was again expressed in the Final Environmental Impact Statement and Master Plan for Great Swamp National Wildlife Refuge (hereafter referred to as the 1987 Master Plan).

Over the years, the Refuge continued to grow in size and complexity. Greater attention was focused on the need for regional or watershed-wide planning and consideration in land use decisions. The most recent and extensive visitor facility planning effort was in 1998 when a partnership sponsored by the U.S. Fish and Wildlife Service and the Morris Land Conservancy was formed. This effort, spearheaded by the Morris Land Conservancy, included participation by many watershed stakeholders and provided a visitor facility concept plan entitled the “Great Swamp Science and Technology Center: Master Plan – We have before us 2 paths” (hereafter referred to as the 1998 Concept Plan).

Service Mandates and Refuge Plans

“The National Wildlife Refuge System Improvement Act of 1997” provided a unifying law to help ensure a vibrant Refuge System. The Improvement Act has further identified **six priority public uses** which include: **environmental education, interpretation, wildlife observation, wildlife photography, hunting and fishing**. These wildlife dependent uses are deemed appropriate uses for the System and, if determined compatible for a particular Refuge, are strongly encouraged. Strategies in meeting the objectives of Great Swamp Refuge’s Public Use Management Plan address the Improvement Act and the purpose and need for the proposed action.

The Act provided a mission for the System and clear standards for its management, use, planning and growth. Appropriate public uses are identified in the Service Mandates and Refuge Plans

Section which follows.

“The mission of the National Wildlife Refuge System is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.”

The Refuge Improvement Act marked a milestone in the National Wildlife Refuge System’s history by making wildlife conservation its overarching mission and ensuring sportsmen, birdwatchers and other wildlife enthusiasts ample opportunities to enjoy these wild lands.

The development of a more suitable Visitor facility supports the Refuge’s approved Public Use Plan (1990) and Regional goals by:

1. “... accommodating public uses that are compatible with Service wildlife management” as identified in the Refuge Improvement Act of 1997.
2. “... maximizing public recognition of the Service and its mission.”
3. “... explaining the purpose(s) of the Refuge to visitors.”
4. “... maximizing the quality of each Refuge visit.”

Opportunity

The opportunity currently exists to acquire a property which has been identified as a high-quality site for the placement of a Visitor facility. It is important to move quickly with this property or the opportunity will be lost.

Integral to the development of a new facility will be the expansion and refinement of the Refuge’s interpretive and environmental education programs. The new Visitor facility will significantly expand the capability to reach a broader, more diverse audience, provide greater interpretive and wildlife-oriented recreational opportunities and enhance overall educational programs both at the Facility and on the Refuge proper. The Service considers the entire site and project as an interpretive opportunity.

A new Visitor facility would support expanded and enhanced Refuge public use programs including: promoting awareness concerning Refuge management practices; providing interpretive displays for visitors to learn about Refuge management, habitat, wildlife, historic uses and the National Wildlife Refuge System; producing slide and other audio visual shows on Refuge and wildlife-oriented topics; developing and coordinating teacher environmental education workshops and working with educators on course curriculum development; establishing and maintaining contacts with colleges to assist with teacher workshops and fill intern positions; conducting regular meetings with area organizations; and providing display space for watershed partners.

Logistics and Conditions

Great Swamp National Wildlife Refuge is strategically located within 1 hour of major population centers in New York, New Jersey and Pennsylvania. This location provides the Refuge with great potential for engaging, interpreting, and educating the public about the Service and the Refuge System's important work, as well as local watershed protection and management efforts and initiatives of the Service and its partners. The target audience for the interpretive displays and environmental education provided by the facility are Refuge visitors, students and teachers.

1.0 Purpose For Proposed Action

The purpose of the Proposed Action is to provide a Visitor facility that will better serve the public and meet the needs of the U.S. Fish and Wildlife Service in managing a complex, highly visited National Wildlife Refuge. The proposed site is a 15 acre horse farm with a house, garage, barn, indoor riding arena and several outbuildings. The existing buildings with modification will be converted to serve as a Visitor facility. The privately owned parcel is located on Pleasant Plains Road in Harding Township and is within the approved acquisition boundary of the Refuge.

The current proposal for a Visitor facility when completed and operational would:

- Serve as a site to greet and orient visitors to the Refuge, as well as provide more efficient flow of visitation in and through the Refuge.
- Interpret management practices of the Refuge preparing visitors for an outdoor experience.
- Broaden awareness of the Refuge, the National Wildlife Refuge System and the U.S. Fish and Wildlife Service.
- Enhance the capability of the Refuge to meet Service priority public uses and Refuge goals by providing higher quality interpretive and education experiences for visitors.
- Provide exhibit space for watershed partners promoting responsible initiatives and sustainable practices that help preserve the ecological integrity of the Great Swamp and the surrounding watershed and illustrating the relationship of a watershed to each visitor (this would also serve as a model approach for watersheds anywhere).
- Provide adequate space to meet the administrative and operational needs of interpretive staff and volunteers, including sufficient space for a gift shop operated by the Refuge Friends group.
- Provide meeting and special event space in the local community.

2.0 Need for the Action

The need for a Visitor facility to clarify and explain the role of the Refuge in land conservation and in the community is clear, but the Refuge's ability to fulfill this need with current facilities is very limited. The current Refuge Headquarters building was primarily designed for the Refuge's administrative functions and is inadequate to meet the Refuge's public use needs. It has always been the intent of the Service to provide the best possible services at this location until a more appropriate facility could be constructed. However, given the design of the current building, limited display space exists for visitor education and interpretation. Refuge staff who make themselves available to answer questions are frequently interrupted from their primary responsibilities due to the current overlay of visitor service on administrative duties. Though at least one staff member at any time is available to aid visitors, this frequently may not be an interpretive staff member and therefore may not be ideally suited to answer specific questions the visitor may have. It would be advantageous for the Service to have a most desirable facility which adequately serves visitors, has exhibit and display space for education and interpretation, has dedicated interpretive and volunteer staff suited to answer questions the public may have, and is located near Refuge trails and facilities. Such a facility could serve as a springboard for visitors using the trails and other facilities on the Refuge and would enable the Service to provide good customer service to all visitors.

The 1987 Master Plan for Great Swamp NWR solicited public comment on the management of the Refuge and its facilities for the next twenty years. During this process, considerable support was expressed for an expanded Environmental Education program that would complement the other two off-Refuge County Park facilities in the Great Swamp Basin. It was also felt that some type of visitor facility was needed. As a result, the 1987 Master Plan for Great Swamp National Wildlife Refuge calls for a facility to be constructed to improve and expand the ongoing Environmental Education and Interpretation program. The facility would house two offices, an exhibit/display area, a large multi-purpose room, restrooms and a workshop area. This plan recognized that although county environmental centers exist just outside the east and west boundaries of the Refuge, the Refuge's message and goals were not adequately being addressed. The Refuge would not compete with the County facilities, but be a more effective partner and better fulfill the Refuge's potential for public use services.

During development of the 1998 Concept Plan, surveys to measure the experiences of 800 visitors within the Great Swamp Watershed were conducted and results incorporated into the concept design of the proposed Science and Technology Center. Over 70% of respondents reported visiting Somerset County's Environmental Education Center (located west of and adjacent to the Refuge on Lord Stirling Road) at least once over the last year, and over 60% of respondents indicated visiting Morris County's Outdoor Education Center (located east of and adjacent to the Refuge on Southern Boulevard; see Attachment 1.) Only 40% reported visiting Refuge facilities; however, it is likely that respondents included the adjacent county facilities and lands in their "visit" to the Refuge and as a result fewer than 40% of respondents may have visited the Refuge. These results, as well as focus group meetings that were held throughout the process, indicate that the community's environmental education needs are being met by existing facilities while identification and recognition of the Refuge and its purpose remains unclear.

While the desire and need for a Visitor facility at Great Swamp has been well recognized and expressed over the years, lack of a suitable site and/or funding has kept it from becoming a reality. The needs outlined in the 1970 and 1987 Master Plans and in the 1998 Concept Plan have been integrated and are updated in this document to consider the latest needs as well as the plans for the future. For example, a Visitor facility should accommodate the growth and needs of the Friends of Great Swamp National Wildlife Refuge (“Friends”, established 1998). This independent, non-profit organization is dedicated to promoting the conservation of the natural resources of the Refuge, fostering public understanding and appreciation of the Refuge, and engaging in activities that will support the mission of the Refuge. Accommodating this dedicated group will be important to the support and successful operation of a Visitor facility. The Friends group regularly provides education and interpretation in the form of guided walks, talks, presentations, and tours. Many of the Refuge’s needs are supported by volunteers of the Friends group, including the collection of biological data, habitat restoration, development and maintenance of boardwalks and other facilities, Refuge events, and providing visitor assistance on weekends. The Friends maintain and operate a small gift shop, auditorium and meeting area in a converted Refuge house (Q-99) located along the Pleasant Plains Road auto tour route. The building is shared with two Refuge offices and lacks adequate public restroom facilities. The space requirements and needs of the Friends group continue to grow while maintenance needs associated with this older building continue to develop. Long-term plans of the Refuge are to move all functions provided by this building to more suitable locations and eventually eliminate the building, thereby improving the viewscape along the Refuge auto tour route. In the fall of 2003, the barn behind this house was removed.

A March 2003 Facility Review by U.S. Fish and Wildlife Service Regional Office staff recognized the deficiencies of the present facilities in meeting the Refuge’s potential for public use. The Refuge would like to present focused interpretive themes and messages, highlight the uniqueness of this Refuge and its wilderness area, and fulfill its potential to serve a wider visitor population. However, space limitations at the Refuge Headquarters preclude expansion of interpretive and educational materials to the degree necessary to achieve these goals.

Existing Facilities

Currently, limited visitor information and services are provided at the Refuge Headquarters, the Friends gift shop and a Visitor Contact Station at the Wildlife Observation Center (WOC). Combined, these three separate facilities are not adequate to meet the Refuge needs.

The Refuge Headquarters serves as a source of visitor information, providing maps, informational pamphlets and brochures to the public. Display space for visitor information and education is very limited (one 9 by 2.5 foot bulletin board and a portable Velcro board measuring approximately 7 feet by 9 feet). While a Refuge staff member is available to provide information and answer questions during the weekday hours of 8 a.m. to 4:30 p.m., this may not always be visitor services staff. The Headquarters building is currently inadequate to meet the administrative purposes for which it was designed and needs to be expanded at some point to

meet administrative needs. As such it lacks space for expanding displays and exhibits to adequately serve visitors.

The building currently occupied by the Friends is about a quarter of a mile from Refuge Headquarters and has a converted one-car garage with a seating capacity of 25 serving as an auditorium for environmental education and interpretation programs. There are no public restroom facilities at this location, requiring rented toilets for events. Volunteers staff the gift shop at this facility on weekends during the spring and fall, which are the busiest seasons for visitation.

The Visitor Contact Station at the W.O.C. (approximately 2.6 miles from Refuge Headquarters) is a 10 by 16 foot wooden shed that offers limited brochure distribution and visitor information, with some limited display space. This contact point is also intermittently staffed by volunteers on weekends during the spring and fall.

In summary, the existing facilities have the following noted deficiencies:

- Refuge Headquarters can only accommodate limited exhibit and display space in marginal areas of the building (such as hallways and entryways) and is grossly inadequate to meet Refuge visitor needs.
- The Refuge Headquarters site does not offer direct foot access to trail systems.
- At Refuge Headquarters, non-visitor services staff members are regularly interrupted from their primary responsibilities to assist visitors.
- Accommodating groups larger than 25 for programs or presentations is not possible in the converted garage presently serving as an auditorium.
- Interpretive and educational programs and visitor service activities are severely limited due to the lack of suitable facilities within which to conduct such programs.
- The Friends gift shop and auditorium is located in a building which lacks public restroom facilities and is in need of costly maintenance and repairs.

3.0 Alternatives Including the Proposed Action

Site Selection

A team consisting of Service employees as well as private citizens conducted a thorough search and evaluation of sites utilizing the criteria established below (these criteria were selected to serve as a screening tool to identify sites that were the most appropriate for location of a visitor facility). The proposed action considers both the desire to enable the Service to address the needs of priority wildlife-dependent recreational uses, as well as consider the watershed-wide focus expressed by partners and the community.

Suitability and availability were major considerations among the criteria identified below, and many sites that were featured in the 1998 Concept Plan were eliminated because they did not meet these criteria. Of those considered, three potentially viable sites for location of the Visitor facility currently exist, one of which is severely limited based on environmental constraints. The specifics of these sites are discussed in Section 3.0.

Site Criterion:

- a. Size and location – Site should include at least 10 acres of buildable property outside the floodplain. The site should be on the fringe of the Refuge and cannot be located within the Wilderness Area.
- b. Buffer – The site should be buffered by open space or 500 feet to the nearest neighboring property.
- c. Environmental impact – Use of the site should improve on current or potential uses and should not negatively impact adjacent or existing open space. New construction must be an environmental enhancement to the site.
- d. Infrastructure – Sewer/septic, water/private well, electric, phone, and other utilities should already exist or potentially be available.
- e. Access/Traffic Impact – Access should be easy from an interstate or county highway. Existing roads should be safe in terms of route, traffic, and sight and no new roads should be needed for access.
- f. Building/Parking – Rehabilitation or adaptive re-use of existing buildings and parking areas is encouraged to limit impact from construction.
- g. Impact on Neighbors – There should be a minimal degree of ‘change’ to the nature of the neighborhood, including minimal disruption in terms of traffic, visual and noise disturbance.
- h. Aesthetic – Buildings should blend in with their natural surroundings and offer access to trails and Refuge resources.

The following section addresses the proposed action and alternatives considered in meeting the purpose and need for the project. Reasons for eliminating alternatives from further consideration are contained within each alternative section and summarized in a separate section. The alternatives considered include:

- Alternative A – Preferred alternative and proposed action, modification of existing structures at Weatherlea Farm
- Alternative B – New construction at Scaff Farm

- Alternative C – New construction at Refuge Headquarters
- Alternative D – No Action

Alternative A (Preferred Alternative) – Modification of existing structures at Weatherlea Farm

The U.S. Fish and Wildlife Service's proposed action is to acquire the property and modify the existing structures at the Weatherlea Farm (Harding Township Block 52, Lot 3) to accommodate a new Refuge Visitor facility on Service-owned property. This site was identified in the 1998 Concept Plan as a preferred location for a Visitor facility. The property is located on Pleasant Plains Road 0.3 miles from the Lee's Hill Road intersection and one quarter mile north of a gated bridge on Pleasant Plains Road over Great Brook. It is directly adjacent to Refuge property within the approved acquisition boundary and the nearby auto tour route can be linked to the property. Refuge Headquarters is located 2.2 miles further along Pleasant Plains Road and an Interstate 287 interchange is approximately 1.5 miles from the property. From I-287 the site is easily accessible (Attachment 2).

The picturesque 15-acre property consists of a large 2-story colonial home which was rebuilt and expanded in the mid 1980's, an indoor riding arena built in 1996, 2 barns and several out-buildings. None of these structures are listed on the national or state historic registers. Except for the wooded Passaic River corridor, the remaining portions of the site consist of pasture, hay fields and a developed building envelope. The western border is the Passaic River, the southern and eastern borders adjoin Refuge property, and the northern border adjoins a residential area. The elevation of the site averages 240 feet above sea level, and about half of the property including much of the pasture and hayfields fall within the floodplain. The house and other structures are located at a slightly higher elevation outside of the floodplain. During flood events, this property remains accessible while flooding occurs farther south on Pleasant Plains Road.

The main building (currently a private residence) will require some modification to accommodate people with physical disabilities but will offer much needed space for exhibit and display areas, a visitor reception/contact area, gift shop and office space for the Friends group and Refuge visitor services. The riding arena has water and electric and could be made into a large multi-purpose room, classrooms for environmental education programs, and exhibit areas for Refuge and watershed partners.

Although specific site plan development has not yet occurred, preliminary plans for parking facilities accommodate 3-4 handicapped parking spots, 10 staff and/or volunteer spots, 50 visitor spots and 2-3 buses at any given time. Although overflow parking will be developed for special events, a 50-car lot should effectively manage use, minimizing impacts to Refuge resources and neighborhood residents while expanding opportunities for visitors. The site access option for an entrance drive has been identified (Attachment 3).

Site Access for Alternative A

Safety concerns regarding the short sight distance at the existing intersection of Lee's Hill and Pleasant Plains Roads and the Service's desire to avoid routing traffic through the residential section of Pleasant Plains Road requires the establishment of a new access location. The Refuge gate on Pleasant Plains Road at Great Brook has been closed to public vehicular traffic since 1986 and would be opened during appropriate hours to allow Refuge visitors access to or from the Visitor facility. Non-Refuge commuter and commercial through-traffic on Pleasant Plains Road would not be permitted and would be prevented by posted signs and enforcement of regulations. Great Brook bridge would need to be strengthened or replaced to accommodate heavier vehicles such as school buses.

The Refuge would construct an entrance drive on Refuge property 675 feet east of Bailey's Mill Road. This drive would connect Lee's Hill Road to Pleasant Plains Road directly at the proposed Visitor facility and would divert Refuge traffic around the residential neighborhood on Pleasant Plains Road. A cul-de-sac on this portion of Pleasant Plains Road will be constructed. The new driveway would also allow Refuge visitors to access the Facility and avoid the existing intersection of Lee's Hill and Pleasant Plains Roads which has very limited sight distances and poses a safety hazard. This access drive would also create a main entrance to the Refuge. The exact layout of this proposed drive has not yet been determined and will require further evaluation.

Site Selection Criteria

The proposed action site was identified in the 1998 Concept Plan as a preferred location for a Visitor facility. The site meets nearly every component of the selection criteria as described in the 1998 Concept Plan including availability, adequacy in size, location, access and environmental impact. The property is minutes away from a major highway, is surrounded on two sides by Refuge property that will never be developed, has usable existing buildings which blend with the local character, and is out of the floodplain. The property directly abuts the Refuge and the auto tour route, providing direct access to other Refuge visitor facilities, a potential hiking trail and outdoor classroom site on adjacent Refuge land. Well and septic needs are provided on-site, and additional utilities (electric, phone) service the property.

The Passaic River borders the property on one side with the Basking Ridge Country Club across the river. Adjacent to the Country Club is 950 acres of Somerset County Park lands dedicated to an Environmental Education Center, foot trails, stables and bridal trails.

Alternative B – New construction at Scaff Farm

This alternative locates a Visitor facility on the 90.6 acre Scaff Farm (Harding Township Block 51 Lot 10) located on Lee's Hill Road in Harding Township. Two houses, two large barns, and a corn crib are located on the property, which operates as a hay farm and falls within the Refuge's

acquisition boundary. None of the structures are listed on the National or State historic registers, and there are no historic structures or sites in proximity of the site. A picturesque gravel driveway accesses the residential portion of the site and continues down the hill to the agricultural lowlands bordering the Refuge. The elevation of the site ranges from 230 to 260 feet above sea level, and about $\frac{3}{4}$ of the property lies within the floodplain, leaving 21 acres suitable to build on. According to FEMA Flood Insurance Maps, the 18-acre knoll where the existing houses and barns are is outside the 100-year floodplain. Rehabilitation and adaptive re-use of existing structures would be limited, and a suitable Visitor facility would have to include significant new construction. Several of the structures may have to be removed prior to construction because of the limited space available for building and parking. The gravel driveway accesses the property from a curve on Lee's Hill Road, making safety a concern. If this alternative were chosen for the proposed Visitor facility, driveway relocation should be studied (Attachment 4).

This alternative is expected to be more expensive because it would require the purchase of a larger property, removal of existing structures and the design and construction of a new Visitor facility. The south end of the property abuts the Refuge in a sensitive area which is closed to the public to prevent disturbances to wildlife, thus limiting the potential for constructing a trail near the Visitor facility as would be desired. The site is not located close to other Refuge visitor facilities. Limited opening of the gate on Pleasant Plains Road and refurbishing or replacing the bridge over Great Brook would not be required with this alternative. Water is supplied by a private well, and septic is handled by an on-site septic system. A new septic system, and possibly a new well, will be needed to meet the needs of a Visitor facility.

Alternative C – New construction at Refuge Headquarters

This alternative considered the potential for utilizing the current Headquarters area by constructing a new Visitor facility there. The Headquarters site is located in the management area of the Refuge along Pleasant Plains Road, and is surrounded by fields maintained as grasslands. Much of the surrounding area is dominated by emergent and forested wetlands and all of the surrounding area is in the floodplain. The benefits of this site are that it is already developed and owned by the U.S. Fish and Wildlife Service. The Headquarters complex was constructed in the early 1980's on the site where a farmstead previously stood. Wetland and floodplain regulations severely restrict further development at the Refuge headquarters site, and construction of a visitor facility of sufficient size to meet the identified goal of the project would not be possible. Furthermore, this site does not meet many of the site criteria as developed in the 1998 Concept Plan. The site does not have easy access from a major interstate or county highway; the site is not on the fringe of the Refuge; the intersection of Pleasant Plains Road and Whitebridge Road does not offer safe sight distance to the east; the site is located in the floodplain; and the desire for rehabilitation or adaptive re-use of existing buildings is not met. Access roads in the swamp periodically flood, resulting in inaccessibility. The site would require all new construction and would not meet the Refuge's desire to separate administrative and operational functions from visitor services. This site is also located in a portion of the Refuge where public access is restricted, limiting the potential for development of a trail system

near the Visitor facility as would be desired.

Alternative D - No Action

Under the No Action alternative, limited visitor services would continue at the current Headquarters building and Friends gift shop in existing facilities. Visitor services activities would remain unchanged, providing limited opportunity to conduct educational and interpretive programs. Problems and space limitations of the current facilities would compromise an ability to meet the Refuge's potential in serving the public and meeting the Service mission, including the intent of the 1997 Refuge Improvement Act. Trail systems and outdoor interpretive opportunities will remain unavailable at the only site regularly staffed and available for visitor information. The current facilities are not adequate in meeting the National Wildlife Refuge System goals with particular emphasis on "...providing an understanding and appreciation of fish and wildlife ecology and our role in the environment" and "provid[ing] Refuge visitors with high quality, safe, wholesome, and enjoyable recreational experiences oriented toward wildlife."

In addition, the No Action Alternative would not meet the intent of the 1970 or 1987 Master Plans or the 1998 Concept Plan for Great Swamp NWR.

Summary of Non-Selected Alternatives:

Alternative B - New construction at the Scaff Farm

The Scaff Farm site was not selected because the property is not currently available. If this site were available, the higher cost of purchase, costs of demolition of existing buildings and the design, planning, and construction of new buildings would require further evaluation. The more isolated nature of the property from other Refuge visitor facilities, the traffic safety issue with entrance to the site, and the juxtaposition of the property with a sensitive, closed area of the Refuge limiting the development of a trail system near the Facility are concerns associated with this site.

Alternative C – New construction at Refuge Headquarters

The construction of a Visitor facility at Refuge Headquarters was not selected because of wetland and floodplain restrictions. The site also fails to meet many of the site criteria as identified in both the 1987 Master Plan and the 1998 Concept Plan, is inaccessible during periodic flooding, does not allow the Refuge to separate operational, maintenance and administrative functions from visitor services, and offers very limited potential for development of a trail system near the Visitor facility.

Alternative D – No Action

The No Action Alternative was not selected because it would not fulfill the needs of the Service and would ignore the intent of the 1970 and 1987 Master Plans which called for the construction

of a Visitor facility for public use.

4.0 Affected Environment

The following information refers to the preferred alternative site (Weatherlea Farm). This site is currently a privately-owned farm available for acquisition. Residential neighborhoods, the Refuge and the Basking Ridge Country Club surround the property.

Description

The 15-acre Weatherlea Farm borders the Passaic River and consists of a developed building envelope, grasslands and forested wetlands. The property drains to the Passaic River, which is designated by the state as non-trout waters.

The biological resources associated with the proposed project site were evaluated by Refuge biologists. The New Jersey and Federal Lists of Threatened and Endangered Species were also reviewed for species that occur on the Refuge and are likely to occur on the site under consideration (Attachments 5 and 6).

Flora

The forested wetland portion of the site along the Passaic River is primarily characterized by the presence of swamp white oak, pin oak, red maple and sweetgum. The majority of the rest of the site is characterized by a mixture of agricultural grasses such as orchard grass and brome grass, with remnant wetland pockets that include rushes and sedges. Some of the higher portions of the site maintain a more upland character and may contain goldenrod and other upland old field species. The developed building envelope at the site is dominated by turf grass, landscape shrubs, and other cultivars.

Fauna

The wooded wetlands in the rear of the property provide habitat for amphibians, reptiles, birds and mammals. State endangered blue-spotted salamanders and state-threatened wood turtles are likely and have been recorded adjacent to the property. Federally threatened bog turtles and state-endangered red-shouldered hawks may also be present on the undeveloped portion of the property. Common mammals in the area include white-tailed deer, woodchuck, striped skunk, red fox, opossum, long-tailed weasel, star-nosed mole, short-tailed shrew, meadow vole, white-footed mouse and meadow jumping mouse. Although these species likely occur on portions of the subject property, it is highly unlikely that they occur in the historically disturbed home site, pastures and riding arena that are proposed for the Visitor facility. However, the proximity of these species makes the site a preferred setting for wildlife viewing and interpretation. A list of wildlife species including birds, mammals, reptiles and amphibians most likely to use the site is included in Attachment 7.

Zoning

The property is bounded on the east and south by Refuge land, on the north by residential homes and on the west by the Basking Ridge Country Club (see attachment 2). The property is zoned “Residence 1”, as are all non-Refuge Harding Township residential properties in the area. This designation allows the uses of single-family private dwelling, farming, and boarding stables. Although the use of the property as a Visitor facility does not fit the current zoning designation for the area, the zoning designation will be changed by the Township to “Public Land” once the property is acquired by the Refuge. Zoning variances are not required for activities on federal lands, however, the U.S. Fish and Wildlife Service will make all reasonable accommodations to maintain the quality of life for its neighbors.

Site Fitness

The U.S. Department of Agriculture, Soil Conservation Service Soil Survey Map for Morris County indicates that the site includes three soil types (Reaville shaly silt loam, deep variant; Parsippany silt loam; Whippany silt loam) which each offer some limitations due to seasonal high water tables at varying depths of 0-4 feet. (This document is available for review at the Refuge Headquarters and in most local libraries.) However, this should not prevent or deter use of the site for a Visitor facility, as the buildings are already present and are out of the floodplain. The structures on the site are not listed on the National or State historic registers. The preferred alternative will utilize the existing structures on the upland portion of the site for the location of the Visitor facility.

Utilities

Potable water for the property is supplied by a private well, the size of which is unknown. An additional well would be needed for a fire sprinkler system in the riding arena, and is feasible.

A relatively new (1987) and large septic system (rated for a 5 bedroom home at 800 gallons per day) is located on the property. An evaluation of the capacity of the system to meet the demands of the proposed use of the property was completed by Refuge staff and Harding Township Board of Health Representatives. Based on New Jersey Department of Environmental Protection regulations (N.J.A.C. 7:9A-7.4), the facility is required to provide for 5 gallons per day per visitor of waste water treatment capacity. From this it can be calculated that the existing system (rated for 800 gallons per day) will support 160 visitors per day, which can be extrapolated to 58,400 visitors per year. Since the Refuge anticipates the yearly number of visitors to range from 10,000 to 15,000, the current system has more than adequate capacity (4 to 6 to times more than that required). Wastewater treatment and discharge will comply with all applicable township and state regulations.

Should a new system be required in the future, all appropriate approvals would be obtained, and additional facilities would be blended in with the surrounding landscape and camouflaged with native plantings to maintain the current look and feel of the property to the extent practicable.

Engineering evaluations of the property indicate that there is ample space for future additional facilities if they become necessary.

A thousand-gallon underground oil storage tank which currently services the site would need to be removed and replaced with an above-ground, double-walled tank.

Phone and electric services are provided to the site.

5.0 Environmental Consequences

As discussed in the Alternatives Section, two of the alternatives (Alternatives C & D) did not meet the Service's or Refuge's needs as identified in the 1970 or 1987 Master Plans. The 1998 Concept Plan identified the Weatherlea and Scaff Farms as potential sites for a Visitor facility. Weatherlea Farm is available and meets the needs of the Refuge and the Service. Therefore, most of the following discussion focuses on this site as the preferred alternative.

Proposed Action - Alternative A, Modification of existing structures at Weatherlea Farm

The proposed action alternative involves the alteration of the existing house, the construction of a gravel parking lot, 1 overflow lot, drilling of a well and tapping into the existing septic system to service the converted riding arena, renovation or replacement of the Great Brook bridge and construction of a new driveway accessing Lee's Hill Road. External modification of the buildings is expected to be minimal, if at all necessary. Excavation activities disturb soil, remove vegetation and expose bare ground to the possibility of accelerated erosion. However, construction will be limited since the existing structures will be used, and the upland portion of the site where the majority of construction will occur is quite level. Construction site erosion is therefore expected to be negligent, especially with control measures employed. All disturbed soils around the facilities will be reclaimed and the site restored with native vegetation after construction is completed.

The use of gravel parking lots and access drives is expected to limit the amount of impervious surfaces to be created. This site currently drains onto the Refuge and the proposed adaptive reuse of this property is not expected to cause increased stormwater runoff. No impacts to the bordering Passaic River are anticipated from this proposal. Impacts to ground-nesting grassland birds, raptors, mammals, reptiles and amphibians are expected to be minimal or negligible due to the siting of the proposed parking lot within the current use envelope.

Wetland Enhancement

The Refuge is very interested in improving the quality of wetland habitats on site to provide increased wildlife benefits. Enhancement efforts will include controlling invasive non-native pest plants identified in the wetland and forested portions and allowing the pastures to mature into early successional grassland habitat.

Threatened and Endangered Species

The Refuge does not anticipate any impacts to State or Federally-listed threatened or endangered species. The proposed alternative will utilize the existing building envelope which has been historically disturbed by human uses and is not likely to provide suitable habitat for any listed species. The specific locations of additional facilities, such as trails, overflow parking, access drive, etc. will require further evaluation and will be constructed to avoid impacts to threatened and endangered species and further, to improve the habitat values and uses.

Current Site Plans

The current Friends office and gift shop at Q-99 would become excess space. Use of this building will be necessary, however, until all components of the proposed action are completed and operational. When all functions of this building have been replaced, the building will be scheduled for demolition. This site will then be restored to natural habitat and the viewscape along the Refuge auto tour route will be enhanced.

Section 5.1 Environmental Consequences of other Alternatives

Alternative B - Scaff Farm

Existing water and septic capacity currently meet residential needs but may be insufficient to support a Visitor facility, possibly requiring the expansion and/or construction of a new well and septic system. To avoid the floodplain, multiple buildings would need to be removed from the site before construction of a new Visitor facility could begin. Demolition of buildings involves some soil disturbance and removal of existing vegetation. The western border of the property is Primrose Brook, which is classified as a trout production stream just north of Lee's Hill Road and trout maintenance in the portion bordering the Scaff property. Demolition and construction activities would need to recognize the sensitivity of this stream and safeguard against impacts to the stream and its ecology.

Alternative C – New construction at Refuge Headquarters

Construction of new buildings of sufficient size to provide enhanced visitor services at this site is highly constrained due to wetland and floodplain issues. If such a large addition was possible, a new well and septic system would be needed. Construction of a new building and parking facilities would result in an increase in impervious surfaces and the elimination of grassland habitat that currently supports white-tailed deer, harriers, red-tailed hawks, grassland birds, foxes, coyotes and a large number of small mammals. The need to separate visitor services from operational maintenance and administrative functions would also not be met.

Alternative D - No Action

This alternative maintains current visitor services at existing Refuge facilities and no

environmental consequence is expected.

Section 5.2 Community Concerns

The draft version of this document was open for public review and written comment for 45 days. During this time, a public meeting was held where concerns with the proposed action could be expressed. Issues and concerns identified during this meeting and received during the public comment period were incorporated into the final version of this document and taken into consideration in further project planning. In addition, another meeting was held at the request of “The Pleasant Plains and Lee’s Hill Road Homeowner’s Association” and concerns identified in that meeting were also incorporated.

Concerns that have been expressed with the project include:

- Disruption due to high numbers of projected visitors to the visitor facility
- Disruption due to increased traffic on Pleasant Plains Road
- Potential air/water pollution associated with the project
- Preserving the historical value of the Pleasant Plains Road bridge
- Preserving the historical significance and maintaining the rural character of the property
- Ability of the septic system to meet the demands of visitor facility usage
- Project is for the benefit of the staff rather than the public
- Visitor facility should be constructed at the Refuge headquarters building
- Environmental education is an outdoor activity and an indoor facility is not necessary
- Land should be kept as open and free of construction
- Visitor center not consistent with Refuge purpose of wildlife protection
- Single entrance from White Bridge Road should provide access to the facility
- Another visitor center is unnecessary and is not embraced by the public
- Environmental impacts of development of the Great Swamp
- Floodplain impacts
- Potable water supply not adequate to meet the demands of the visitor facility
- Threatened and Endangered species impacts
- Wetlands impacts
- Inclusion of bridal paths into project
- The U.S. Fish and Wildlife Service is paying a premium for the property
- Facility will include administrative offices for partners
- Staff residences will be located on the property
- Access Option 2 should not be viable and deleted from the plan
- Noise, visual, and security issues

A detailed account of the comments and community concerns with the project can be found in Appendix B.

6.0 Socio-Economic Impacts

The Refuge serves as a popular recreation destination for bird watchers, wildlife and nature enthusiasts, environmental education classes, photographers and hunters. Bird watchers and ornithologists have long recognized the importance of the Refuge as a resting stop for a large variety of migratory waterfowl and shorebirds, as well as many species of migratory songbirds that stop during the spring and fall migration. During migration many recreational bird watchers, bird identification classes and other organized groups use the Refuge. Historically, Refuge visitation has been as high as 386,000. However during the last 10 years annual visitation has stabilized at approximately 350,000 visits.

A 1995 public use study at various refuges across the country identified the economic and social impacts on the local area and calculated actual expenditures which a refuge generates. Don Edwards San Francisco Bay National Wildlife Refuge was used to obtain comparison estimates for Great Swamp National Wildlife Refuge because it experiences similar visitation, is surrounded by an urban population, is located in a highly urbanized and relatively affluent community, and hosts similar visitor uses. Non-consumptive uses such as wildlife observation, birding, hiking, and photography generated \$1.36 million in expenditures, while the total monetary value of economic activity generated in the area by refuge visitor spending was almost \$1.8 million. The demand of this economic activity was estimated to generate 36 full-time and part-time jobs with a total employment income of \$827,600. All told, this Refuge generated \$2.60 in economic effects for every \$1 of budget expenditures. If this were applied to Great Swamp National Wildlife Refuge, an estimated \$2.6 million in local economic benefits are generated by the Refuge presence.

The quality of life that the Refuge contributes to the local area cannot be disputed or calculated. The Refuge presence lends a rural character to the area and preserves open space, in some cases increasing property values in neighboring areas. The public comment process of the 1987 Master Plan indicated that there is consistent support for wildlife protection efforts and the belief these efforts should continue. In addition, the Refuge is recognized as a unique and rare resource.

7.0 Consultation and Coordination

In preparation of this document, the following entities were consulted:

U.S. Congressman Rodney Frelinghuysen
U. S. Fish and Wildlife Service, Northeast Regional Office
 Division of National Wildlife Refuges
 Division of Engineering
 Division of Realty
 National Environmental Policy Act Coordinator
U. S. Fish and Wildlife Service, Ecological Services, New Jersey Field Office
Department of Interior, Solicitors Office
Friends of Great Swamp National Wildlife Refuge
Great Swamp Watershed Association
Ten Towns Great Swamp Watershed Management Committee

The Trust for Public Land
New Jersey Audubon Society
Harding Township officials
 Mayor
 Administrator,
 Deputy Clerk
 Planning Board Representative
 Township Committeeman
 Chairman, Board of Health
Somerset County Environmental Education Center
Morris County Outdoor Education Center
The Raptor Trust
Harding Land Trust
Morris County Engineer
Morris County Heritage Commission

The public comment period was open from 12/11/03 to 1/26/04. A public meeting was also held on 12/30/03. A total of 26 people attended the meeting and 9 people provided comments at the meeting. During the comment period a total of 22 people responded. In addition, Great Swamp NWR, Refuge Manager Koch, met at their request with the "Pleasant Plains and Lee's Hill Rd. Homeowner's Association" and John Murray, Harding Township Mayor on 2/9/04. Additionally, Refuge Manager Koch had multiple conversations about the proposed visitor facility with Brian Mathews, leader of the "Pleasant Plains and Lee's Hill Rd. Homeowner's Association" and other Pleasant Plains Road and vicinity residents.

8.0 Appendices

Appendix A – References

Great Swamp National Wildlife Refuge Master Plan. U.S. Department of the Interior Fish and Wildlife Service, Bureau of Sport Fisheries and Wildlife. 1970.

Soil Survey of Morris County, New Jersey. U.S. Department of Agriculture, Soil Conservation Service. 1976.

Final Environmental Impact Statement and Master Plan, Great Swamp National Wildlife Refuge. U.S. Fish and Wildlife Service. 1987.

Banking on Nature: The Economic Benefits to Local Communities of National Wildlife Refuge Visitation. U.S. Fish and Wildlife Service. 1997.

Great Swamp Science and Technology Center Master Plan. Morris Land Conservancy and U.S. Fish and Wildlife Service. 1998.

Draft Environmental Assessment, Great Swamp Science and Technology Center. PK Environmental Planning and Engineering. 2000.

Appendix B – Comments and Responses

Comments received during the public comment period have been addressed in this section. A total of 13 people had positive comments and 9 people expressed concerns.

Support:

Numerous letters and comments supporting the proposed facility were received. We appreciate the support expressed by the public, our neighbors and partners, in developing this Environmental Assessment.

Concerns:

Comments received during the comment period are addressed in this section.

Numbers of Projected Visitors to the Proposed Visitor Facility:

There has been much discussion regarding the number of visitors that are expected at the proposed visitor facility. Often quoted, but easily misunderstood and misused, is the estimated total number of visits that the entire Refuge receives each year (approximately 350,000). The confusion here stems from: 1) an editorial mistake in the draft plan (should read 350,000 visits and not 350,000 visitors) and 2) the way visitation is calculated. The number represents the total number of visits per year to each of 9 areas of the Refuge where visitation is counted. For example, if one person would go to each of these areas on a given day, that would be recorded as 9 visits. If the same person returned the next day and again went to the same areas, the number of visits would be up to 18 and so on. Therefore, the total visitation number includes daily repeat visits by a single person such as local area residents and avid birdwatchers. This accounting helps determine types, volume, and areas of use to assist in making management plans and decisions. As such, several parties expressed concern that such a high number of visitors (note difference between visits and visitors) would ruin the character of the property, degrade the wildlife viewing opportunities, and adversely impact wildlife habitat. The Refuge shares these concerns because it has a “wildlife first” mission. With this in mind, we contacted several nearby visitor facilities with somewhat related characteristics to get a better sense of the potential number of visitors that could be expected at the proposed new facility.

Somerset County Environmental Education Center reported receiving approximately 10,000 visitors per year. This major visitor facility has a staff of 7 full time naturalists and an additional support staff of 7 full time employees. They host approximately 4 major special events per year, which account for almost half of their visitors.

From 1996 to 2002, the Great Swamp Outdoor Education Center reported approximately 22,000 to 27,000 visitors. This facility has a dedicated environmental education staff, and focuses on elementary and pre-school programs as well as adult hikes, programs, and tours. The center employs 3 full time naturalists and 3 part-time naturalists to support its programs.

The DeKorte Environmental Education Center (also known as the Meadowlands Environment Center) is located in Lyndhurst, NJ. The Meadowlands Environment Center is a leading environmental education center that hosts approximately 11,000 students and 50,000 visitors annually in its educational programs.

The visitor center at the Jockey Hollow Encampment Area of the Morristown National Historical Park, which is run by the National Park Service, received approximately 25,500 visitors in 2003. This highly visited park focuses on historical interpretation for school and tourist groups.

John Heinz National Wildlife Refuge at Tinicum is located 1 mile from Philadelphia International Airport. The Cusano Environmental Education Center at this Refuge has over 6,500 students participate in field trips each year and approximately 20,000 people come to their visitor facility each year.

Currently, the Refuge headquarters receives approximately 2,000 visitors per year. With the expanded visitor services that are planned for the new facility, we would expect annual visitation to be consistent with that observed at the Somerset County facility, ranging from 10,000 to 15,000 visitors per year.

Traffic on Pleasant Plains Road:

Several comments were concerned with potential through traffic on Pleasant Plains Road, associated safety issues, and congestion. Commuter traffic on Pleasant Plains Road will be precluded by a gate that will not be open during commuter hours. Additional speed bumps will be placed on the road and we will enhance the signage and conduct more visitor outreach. The 15 mph speed limit along the Refuge section of Pleasant Plains Road will be strictly enforced and new lower limits will be sought for the paved township-maintained section (now 25 mph). Law enforcement issues will be handled by Refuge officers.

Congestion concerns were largely driven by overestimates (350,000 annually) of the number of visitors that are expected at the proposed facility. An average of 25,000 vehicles has been counted annually on Pleasant Plains Road. This breaks down to 69 vehicles per day. We estimate approximately 10,000 – 15,000 visitors per year will be expected to use the visitor center.

If the proposed plan is adopted, the Refuge will work collaboratively with the Morris County Engineer to design a safe access to the proposed facility off of Lee's Hill Road (county road). Preliminary discussions with the Morris County Engineer have been supportive of the plan. A cul-de-sac will be placed on the residential portion of Pleasant Plains Road to preclude traffic and maintain the residential character of the existing neighborhood. The Service could place supplemental plantings along its new access road, if requested by local home owners, to further insulate the residential community. The gate on the Pleasant Plains Road Bridge was originally closed to through traffic in 1986 by the Refuge. When the gate is reopened for limited hours the Refuge will allow only compatible and appropriate uses of the road, while striving to maintain

the existing character and safety it has created and maintained along the road for visitors and wildlife.

Air / Water Pollution:

Air pollution is a pervasive problem in northern New Jersey and with a major highway (Interstate 287) less than a mile to the west of the property we can understand the concern. Air pollution concerns associated with the project center on increased automobile and bus traffic. Since we anticipate a limited number of bus visits each year and since many of the automobile visits to the Refuge are already occurring (i.e. people who normally visit the Refuge will likely stop at the visitor facility as part of their visit to the auto tour route, wilderness area, Wildlife Observation Center, etc.), we do not anticipate a measurable increase in air pollution. Nonetheless, the Service's Division of Engineering, Environmental and Facility Compliance Branch will be asked to evaluate this issue.

Water pollution is an issue that the Great Swamp National Wildlife Refuge deals with on a daily basis. Because of its location in the Great Swamp Watershed, the Refuge receives non-point source pollutants from its surrounding watershed. The Refuge and its many partners, including the Great Swamp Watershed Association, the Ten Towns Great Swamp Watershed Management Committee and Member Municipalities, County Planning, Engineer and Soil Conservation personnel, New Jersey Department of Environmental Protection, and the Passaic River Coalition work diligently to reduce this problem. If the proposed plan is adopted, the Refuge will follow all applicable Best Management Practices and use sound environmental stewardship through all aspects of the limited disruption required for adaptive reuse of the property. We do not anticipate any large scale disturbances of the landscape, large scale heavy equipment use, or associated runoff problems. In short, we will not contribute to a problem that we have worked on so diligently to quell.

Historical Value of the Pleasant Plains Road Bridge:

While recognizing the historical significance of the Pleasant Plains Road Bridge, our preference would be to retrofit reinforcements on the existing structure to allow buses to cross safely while maintaining the historical character and structure of the bridge. If such a retrofit would degrade the historical integrity of the bridge or not be feasible from an engineering standpoint, construction of a new bridge would be recommended along with retaining the historic bridge for pedestrians. The current bridge would also serve as a wildlife observation platform on Great Brook, a key wildlife observation area. Partners interested in the historical preservation of the bridge would hopefully step forward.

Historical Significance/Maintaining the Rural Character of the Property:

The property has a pastoral setting and fits in well with the rural character of Harding Township. It is bordered on two sides by the Refuge and on a third side by the Passaic River. The inherent

beauty and location of the property are some of the factors that generated interest in creating a visitor facility of this site in the first place. The Service is required to evaluate the historical significance of the structures on the property and maintain them if they are deemed historically significant. Overall, the Service plans on maintaining the current look and feel of the property through adaptive reuse of the existing structures. No additional structures are needed or anticipated, none of the current structures are slated for removal, and the Service will renovate the property so that it appears much the same way that it does today. Similarly, the natural setting of the property will be maintained on the already developed section of the property. The natural setting on the floodplain and wetlands portions of the site will be restored to a more natural non-pasture meadow.

Septic System Capacity:

A relatively new (1987) and large septic system (rated for a 5 bedroom home at 800 gallons per day) is located on the property. An evaluation of the capacity of the system to meet the demands of the proposed use of the property was completed. Based on New Jersey Department of Environmental Protection regulations (N.J.A.C. 7:9A-7.4), the facility is required to provide for 5 gallons per day per visitor of waste water treatment capacity. From this it can be calculated that the existing system (rated for 800 gallons per day) will support 160 visitors per day, which can be extrapolated to 58,400 visitors per year. Since the Refuge anticipates the yearly number of visitors to range from 10,000 to 15,000 (see discussion on the number of visitors expected at the facility), the current system has more than adequate capacity (4 to 6 to times more than that required). Wastewater treatment and discharge will comply with all applicable township and state regulations.

Should a new system be required in the future, all appropriate approvals would be obtained, and additional facilities would be blended in with the surrounding landscape and camouflaged with native plantings to maintain the current look and feel of the property to the extent practicable. An engineering evaluation of the property done on 11/1/02 indicates that there is ample space for future additional facilities if they become necessary.

The Project is for the Benefit of the Staff Rather than the Public / Why not expand the Refuge Headquarters Building:

The primary purpose of the project is to enhance visitor services. Only a limited support staff and volunteers would be located at the proposed visitor facility for administrative purposes. The Refuge has plans to expand the current headquarters building to accommodate current and future staffing needs however the headquarters site would not accommodate the new construction needs of a visitor facility due to flood plain and wetland constraints.

Environmental Education is an Outdoor Activity:

Environmental education is largely an outside activity. However, many components of environmental education by necessity require an indoor laboratory or classroom. Brief

preparatory lessons and follow-up activities are often requisite to get the most out of the outdoor components of each lesson. A facility will also provide an inclement weather alternative for groups and individuals as well as orientation to the outdoor facilities the Refuge provides. In addition, the visitor facility will provide a forum for telling the Great Swamp story, e.g. how the whole area nearly became a jetport in the early 1960's; how conservationists and concerned citizens protected the swamp; and how non-point source pollution and runoff continue to threaten the area. The regional watershed approach to land use decisions, purpose of the Great Swamp NWR and overall mission of the National Wildlife Refuge System will be better understood.

Keep the Land Open and Free of Construction

One critic says that they would support the acquisition of the property if it was left as raw land. The property isn't currently "raw land"; it is a 15 acre horse farm with numerous buildings. The Service's plan would not add any buildings to the property, but rather re-use the existing structures for the benefit of the public, striving to maintain the beauty and setting that the property currently provides.

Visitor Center not Consistent with Refuge Purpose of Wildlife Protection

While all National Wildlife Refuges have a mission placing wildlife conservation first, the National Wildlife Refuge Improvement Act of 1997 actually identifies environmental education and interpretation as priority public uses that when and where compatible should receive consideration for increased opportunities. Other priority public uses also identified in this Act are wildlife observation, photography, hiking, and fishing.

Keep Single Entrance from White Bridge Road

Keeping a single entrance from White Bridge Road is not realistic for a number of reasons. Access from Interstate 287 is the shortest, easiest and least complicated approach to the property. The proximity to the I-287 interchange was in fact one of the assets of this property. Having access both, from the south (by opening the gate on the bridge on Pleasant Plains Rd) and the north, will only serve to reduce traffic and associated concerns by dissipating it over more of the Refuge and surrounding communities. In this way, anxiety over expected increases in traffic and associated concerns is not transplanted from one neighborhood in Harding Township to another in Long Hill Township. Many Refuge visitors will continue to access the Refuge as they currently do from the south as they are coming in from Interstate 78 corridor and other points south. We expect that having two entrances with controlled access between, will limit traffic-related concerns and have less of an impact on our neighbors than if only one access was used. The Refuge will take all necessary steps to eliminate inappropriate uses of Pleasant Plains Road (e.g. commercial and commuter through traffic) and to keep speeds down.

Another Visitor Center is Unnecessary and is Not Embraced by the Public

There is and has been a great need for a visitor facility to orient and better serve Refuge visitors.

The current lack of adequate facilities has long been identified as an obstacle to satisfying this need. The Refuge would not be competing with the Morris and Somerset County facilities because of difference in missions, however, the Refuge would become a more effective partner and better fulfill the Refuge's potential for public use services.

There has been tremendous support over the years as part of the planning efforts for a visitor facility as shown in The 1970 Master Plan, 1987 Master Plan, and 1998 Concept Plan. The proposed visitor facility has received widespread support experienced during the public meeting in December 2003 and in subsequent written comments received on the draft EA. This support comes from individual citizens, some neighbors of the property, representatives within Harding Township government, and watershed and open-space partners including members of the Ten Towns Great Swamp Watershed Management Committee, Friends of the Great Swamp National Wildlife Refuge, Harding Land Trust, Harding Township Open Space Trust Committee, the Passaic River Coalition and the Great Swamp Watershed Association. While some very outspoken opponents to the project have expressed concerns, most came from only a few residents living nearby. Many of their concerns are also shared by the Fish and Wildlife Service and the Refuge will strive for mutually agreeable resolutions to these issues.

Environmental impacts of Development of the Great Swamp

The proposed alternative will utilize the existing building envelope which has been historically disturbed by human uses. If the proposed plan is adopted, the Refuge will follow all applicable Best Management Practices and use sound environmental stewardship through all aspects of the limited disruption required for adaptive reuse of the property. We do not anticipate any large scale disturbances of the landscape, large scale heavy equipment use, or associated runoff problems.

The Refuge will actually improve the quality of wetland habitats on site to provide increased wildlife benefits. Enhancement efforts will include controlling invasive non-native pest plants identified in the wetland and forested portions and allowing the pastures to mature into early successional grassland habitat.

Floodplain

Disturbances to the floodplain are not envisioned. All activities on the property must comply with state, Federal, and local floodplain regulations. The Service will work with its state, Federal, and local partners throughout the process to ensure compliance with all applicable floodplain regulations.

Potable Water Supply

There should be no concerns with potable water supply on the property. There is ample recharge of the aquifer to support the use posed by the visitor facility. No adverse impacts on neighboring water supplies are anticipated. In discussions with the Harding Township Health Department,

the proposed use change from residential is expected to consume less water with the anticipated visitor use than the current residential use.

Threatened and Endangered Species

The Refuge does not anticipate any impacts to State or Federally-listed threatened or endangered species. In the proposed alternative, the Refuge will utilize the existing building envelope which has been historically disturbed by human uses and is not likely to provide suitable habitat for any listed species. Any additional facilities, such as trails, overflow parking, access drive, etc. will require further evaluation and will be constructed to avoid impacts to threatened and endangered species.

Wetlands

All activities at the site must comply with the New Jersey Freshwater Wetlands Protection Act, the Clean Water Act, and applicable local regulation. The Service will work with its state, Federal, and local partners throughout the process to ensure compliance with all applicable wetland regulations.

Inclusion of Bridal paths into project

The inclusion of bridal paths into this project will not be considered at this time because it is not in the scope of this project. Horses currently are only permitted on Pleasant Plains Road.

Service is paying a premium for the property

The Service is required by law to pay fair market value for any land that it purchases. This property and other properties the Service is planning to acquire must first be appraised according to standardized procedures to determine the current fair market value. All appraisals are then reviewed by a Fish and Wildlife Service reviewer before the appraisal is approved and an offer made. This is a mandated procedure which protects both the interests of the government and the seller.

Why will this facility include administrative offices for partners?

The visitor facility will not include administrative offices for the Great Swamp Watershed Association or the Ten Towns Great Swamp Watershed Management Committee. However, these valued conservation partners and others would be invited to exhibit educational and interpretive displays and information at the facility under the theme of regional watershed approach to land use management.

Will staff live at this location?

There will be no condominiums built within the existing barn complex as some opponents

suggest. No staff will live at this site.

Access Option 2 should not be viable

This access option from Lee's Hill Rd. directly to Pleasant Plains Rd. has been removed from the Final Environmental Assessment due to safety concerns (see Site Access for Alternative A). In addition, neighbors and town officials have expressed support over the proposed access location that would be constructed on Refuge property 675 feet east of Bailey's Mill Road. This drive would connect Lee's Hill Road to Pleasant Plains Road directly at the proposed Visitor facility and would divert Refuge traffic around the residential neighborhood on Pleasant Plains Road.

Noise, Visual, Security Issues

Construction noise is expected to be minimal, given that most work will be internal renovation. Construction will be limited to the creation of a new septic system, well, oil tank removal and replacement, parking lot and drive construction as necessary. In all likelihood this work will take place during regular working hours on weekdays. The undeveloped nature of surrounding areas also reduces disturbance to the public and neighboring residences.

Because the proposed alternative utilizes existing buildings, visual disturbance due to the location of a Visitor facility at this site is expected to be minimal. The existing buildings maintain the character of the surrounding area and greatly reduce visual disturbance. Visual disturbance due to the placement of a Visitor facility at this site is expected to be limited to increased traffic and parking at the site and low-level night lighting for security. Parking areas will be placed behind existing buildings for additional screening. Supplemental vegetative plantings will be used as needed to further buffer visual impacts of the site for neighboring residents.

Occasional trespass and vandalism occur on the Refuge and are dealt with by Refuge law enforcement officers and the local police departments. Additional security issues at the site due to the location of a Visitor facility there are expected to be minimal and will be limited by night lighting. Gating the facility to vehicles after operating hours will be considered and the buildings will be guarded by a security alarm system.

Actual visitation to the facility will be limited by available parking spaces. Though final plans for parking facilities have not yet been prepared, the Refuge anticipates providing 50 spaces for visitors as well as 10 staff/volunteer spaces, 3-4 handicapped spaces, space for 2 to 3 buses and 1 overflow lot for special events. Undue idling of vehicles will not be allowed.

